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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application of

Ahmed Sallam

Application No.: 10/814,843

Filed: March 30, 2004

For: Using Mobility Tokens To Observe  
Malicious Mobile Code

Confirmation No.: 6495

Group Art Unit: 2161

Examiner: Safet Metjahic

**INFORMATION DISCLOSURE  
STATEMENT**

SONNENSCHN NATH & ROSENTHAL LLP  
Customer No. 45969

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope, addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 29, 2005.

SONNENSCHN NATH & ROSENTHAL LLP

Dated 08/29/05 By: Jeffrey Brill  
Jeffrey Brill

Sir:

Applicant submits herewith patents, publications or other information [attached hereto and listed on the attached Form PTO-1449 (modified)] of which he is aware, which he believes may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

This Information Disclosure Statement:

- (a) ☐ accompanies the new patent application submitted herewith. 37 CFR § 1.97(a).
- (b) ☐ is filed within three months after the filing date of the application or within three months after the date of entry of the national stage of a PCT application as set forth in 37 CFR § 1.491.
- (c) ☒ as far as is known to the undersigned, is filed before the mailing date of a first Office Action on the merits, or before a first office action after filing a Request for Continued Examination under §1.114.
- (d) ☐ is filed after the first office action and more than three months after the application's filing date or PCT national stage date of entry filing but, as far as is

known to the undersigned, prior to the mailing date of either a final rejection or a notice of allowance, whichever occurs first, and is accompanied by either the fee (\$180) set forth in 37 CFR § 1.17(p) or a certification as specified in 37 CFR § 1.97(e), as checked below.

- (e) ☐ is filed after the mailing date of either a final rejection or a notice of allowance, whichever occurred first, and the Issue Fee has not been paid, and is accompanied by the fee (\$130) set forth in 37 CFR § 1.17(i)(1) and a certification as specified in 37 CFR § 1.97(e), as checked below. This document is to be considered as a petition requesting consideration of the information disclosure statement.

A list of the patent(s) or publication(s) is set forth on the attached Form PTO-1449 (Modified). A copy of the items on PTO-1449 (Modified) is supplied herewith, except for issued United States Patents and Published United States Patent Applications.

A concise explanation of relevance of the items listed on form PTO-1449 (Modified) is:

(h) ☐ not given

(i) ☐ given for each listed item

(j) ☒ given for only non-English language listed item(s) The von Babo reference enclosed herewith pertains to the infestation of computer files by viruses. The viruses can reside in data files and backups thereto.

(k) ☐ is in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references [copy attached].

The Examiner is reminded that a "concise explanation of the relevance" of the submitted items "may be nothing more than identification of the particular figure or paragraph of the patent or publication which has some relation to the claimed invention," MPEP § 609.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR § 1.56(a) exists. It is submitted that the Information Disclosure Statement

complies with 37 CFR § 1.98 and MPEP § 609 and the Examiner is respectfully requested to consider the listed references.

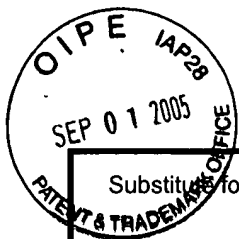
The Commissioner is hereby authorized to charge our Deposit Account No. 19-3140, for any fees required in connection with the filing of this Information Disclosure Statement. **A duplicate copy of this Notice is enclosed for this purpose.** In particular, in the event that an Office Action has crossed in the mail with this Information Disclosure Statement, the Commissioner is authorized to charge the above-named deposit account for any fees required pursuant to CFR §§ 1.17(p) or 1.17(i)(1).

Respectfully submitted,  
SONNENSCHN NATH & ROSENTHAL LLP

Dated: 8/29/05

By: 

Jeffrey Brill,  
Reg. No. 51,198  
Attorney of Record  
Attorneys for Applicant(s)



Substitute for form 1449A/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

1

of

4

## **Complete if Known**

Application Number	10/814,843
Filing Date	March 30, 2004
First Named Inventor	Ahmed Sallam
Group Art Unit	2161
Examiner Name	Safet Metjahic
Attorney Docket Number	44420423-8591

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		4,776,537	10/11/1988	Kennicott	
		4,888,798	12/18/1989	Garsude et al.	
		5,050,212	09/17/1991	Earnest	
		5,103,476	04/07/1992	Waite et al.	
		5,182,770	01/26/1993	Medveczky et al.	
		5,432,851	07/11/1995	Scheidt et al.	
		5,450,576	09/12/1995	Kennedy	
		5,473,769	12/05/1995	Cozza	
		5,530,757	06/25/1996	Krawczyk	
		5,548,532	08/20/1996	Menand et al.	
		5,564,054	10/08/1996	Bramnick et al.	
		5,572,590	11/05/1996	Chess	
		5,596,711	01/21/1997	Burckhardt et al.	
		5,606,609	02/25/1997	Houser et al.	
		5,625,693	04/29/1997	Rohatgi et al.	
		5,661,848	08/26/1997	Bonke et al.	
		5,708,776	01/13/1998	Kikinis	
		5,758,359	05/26/1998	Saxon	
		5,765,151	06/09/1998	Senator	
		5,799,088	08/25/1998	Raike	
		5,802,080	09/01/1998	Westby	
		5,854,759	12/29/1998	Kaliski Jr. et al.	
		5,922,072	07/13/1999	Hutchinson et al.	
		5,951,698	09/14/1999	Chen, et al.	
		5,956,475	09/21/1999	Burckhardt et al.	
		5,956,481	9/21/1999	Walsh et al.	
		5,974,546	10/26/1999	Anderson	
		5,978,917	11/02/1999	Chi	
		5,987,610	11/16/1999	Franczek, et al.	
		6,000,032	12/07/1999	Millard	
		6,014,744	01/11/2000	McKaughan et al.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/814,843
				Filing Date	March 30, 2004
				First Named Inventor	Ahmed Sallam
				Group Art Unit	2161
Examiner Name	Safet Metjahic				
Attorney Docket Number	44420423-8591				
Sheet	2	of	4		

		6,014,767	01/11/2000	Glaise	
		6,048,090	04/11/2000	Zook	
		6,061,788	05/09/2000	Reynaud et al.	
		6,079,016	06/20/2000	Park	
		6,088,803	07/11/2000	Tso et al.	
		6,104,872	08/15/2000	Kubota, et al.	
		6,108,799	08/22/2000	Boulay, et al.	
		6,167,434	12/26/2000	Pang	
		6,192,379	02/20/2001	Bekenn	
		6,357,008	03/12/2002	Nachenberg	
		6,493,007	12/10/2002	Pang	
		6,535,891	03/18/2003	Fisher et al.	
		6,611,925	08/26/2003	Spears	
		6,721,721	04/13/2004	Bates et al.	
		US 2004/0015726	01/22/2004	Szor, Peter	
		US 2004/0162808	08/19/2004	Margolus et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		EP 0858031 A1	08/12/1998	IBM		
		WO 93/25024 A1	12/09/1993	Cyberlock Data Intelligence		
		WO 95/15522 A1	06/08/1995	Robert Jones		
		WO 95/22794 A1	08/24/1995	Apple Computer		
						<input type="checkbox"/>

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Examiner Name	Safet Metjahic				
Sheet	3	of	4	Attorney Docket Number	44420423-8591

OTHER ITEMS – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	CiteNo. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		RICHTER, J., Microsoft.com web pages (online). "Design a Windows NT Service to Exploit Special Operating System Facilities", October 1997 (retrieved 2003-08-29). Retrieved from the Internet: <URL: <a href="http://www.microsoft.com/msj/1097/winnt.aspx">http://www.microsoft.com/msj/1097/winnt.aspx</a> .	
		PARKHOUSE, Jayne, "Pelican SafeTNet 2.0", [online] June 2000, SC Magazine Product Review, [retrieved 12/1/2003] Retrieved from the Internet: <URL: <a href="http://www.scmagazine.com/standalone/pelican/sc_pelican.html">http://www.scmagazine.com/standalone/pelican/sc_pelican.html</a> >	
		SZOR, P. and Ferrie, P., "Hunting for Metamorphic", Virus Bulletin Conference, September 2001, Virus Bulletin Ltd., The Pentagon, Abingdon, Oxfordshire, England, pp. 123-144.	
		News Release – Symantec Delivers Cutting-Edge Anti-Virus Technology with Striker32", October 1, 1999, 2 pages, [online]. Retrieved on November 11, 2003. Retrieved from the Internet:<URL: <a href="http://www.symantec.com/press/1999/n991001.html">http://www.symantec.com/press/1999/n991001.html</a> >. Author unknown.	
		SZOR, P. and Ferrie, P., Attacks on Win32", Virus Bulletin Conference, September 1998, Virus Bulletin Ltd., The Pentagon, Abingdon, Oxfordshire, England, pp. 57-84.	
		SZOR, P. and Ferrie, P., "Attacks in Win32 Part II", Virus Bulletin Conference, September 2000, Virus Bulletin Ltd., The Pentagon, Abingdon, Oxfordshire, England, pp. 47-68.	
		VON BABO, Michael, "Zehn Mythen um Computerviren: Dichtung und Wahrheit über den Schrecken des Informatikzeitalters," Technische Rundschau, Hallwag, Bern, Switzerland, Vol. 84, No. 36. September 4, 1992, pp. 44-47.	
		DELIO, M., "Virus Throttle a Hopeful Defense", Wired News, retrieved from Internet <a href="http://www.wired.com/news/print/0,1294,56753,00.html">Http://www.wired.com/news/print/0,1294,56753,00.html</a> 1/7/2003.	
		"System File Protection and Windows ME", [online], last updated December 4, 2001, [retrieved on 4/9/2002] Retrieved from the Internet: <URL: <a href="http://www.Microsoft.com/hwdev/archive/sfp/winME_sfpP.asp">http://www.Microsoft.com/hwdev/archive/sfp/winME_sfpP.asp</a> >.	

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Sheet	4	of	4	Attorney Docket Number	44420423-8591

		"Description of Windows 2000 Windows File Protection Feature (Q222193)", [online], first published May 26, 1999, last modified January 12, 2002, [retrieved on 4/9/2002] Retrieved from the Internet <URL: <a href="http://support.microsoft.com/default.aspx?scid=kb:EN-US;q222193">http://support.microsoft.com/default.aspx?scid=kb:EN-US;q222193</a> >.	
		"Software: Windows ME; Windows ME and System File Protection", [online] last updated March 11, 2002, [retrieved on 4/9/2002] Retrieved from the Internet: <URL: <a href="http://www.wackyb.co.nz/mesfp.html">http://www.wackyb.co.nz/mesfp.html</a> >.	
		MACNAMRA, JOHN E., "Technical Aspects of Data Communication", 2ed. 1982, Digital Equipment Corporation, U.S.A. pp. 110-122.	
		ORE, Oystein, "Number Theory and Its History", 1976 Gudron Ore, U.S.A. pp. 124-129.	
		SZOR, P., "Memory Scanning Under Windows NT", Virus Bulletin Conference, September 1999, Virus Bulletin Ltd., The Pentagon, Abingdon, Oxfordshire, England, pp. 1-22.	
		SCHNEIER, BRUCE, "Applied Cryptography", 2ed. 1996, Bruce Schneier, U.S.A. pp. 436-441.	
		NAIR, et al., "A Symbol Based Algorithm for Hardware Implementation of Cycle Redundancy Check", IEEE, 1997.	
		"PC Medic 97 User's Guide" Manual, McAfee Associates, Inc., 1997, 60 pages	
		Symantec Corporation, "Norton Utilities for Windows User's Guide - Version 2.0", 1996.	
		Symantec Corporation "Norton AntiVirus Corporation Edition 7.0" Manual, 1999, Version 1, 44 pages	

Examiner Signature		Date Considered	
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